

REMARKS

Claims 1-17 are pending in the application. No claims have been allowed. Claims 1-17 stand rejected under an Office Action mailed February 4, 2009 for the following reasons:

Claims 1, 2-4, 6-8, 10 and 14-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by Nielsen, U.S. Patent No. 6,186,027 in view of Hand, U.S. Patent No. 1,870,112.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Nielsen in view of Hand and further Duda, U.S. Patent No. 2,287,343.

Claims 1, 4, 5, 11-13 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gelbein, U.S. Patent No. 5,584,210 in view of Nielsen and further in view of Hand.

Claims 1-17 remain at issue.

Statement of the Relevant Law Pertaining to 35 U.S.C. § 103(a)

The proper standard for rejection of claims under 35 U.S.C. § 103(a) is whether the differences between the claimed subject matter and the prior art are such that the claimed subject matter would have been obvious to one of ordinary skill in the art at the time the invention was made. In *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 82 U.P.S.Q.2d (BNA) 1385 (2007), the United States Supreme Court confirmed the following basic obviousness analysis:

In evaluating whether or not an invention is obvious, inquiry into the following three factors must be made:

1. The scope and content of the prior art;
2. The level of ordinary skill in the prior art; and
3. The differences between the claimed invention and the prior art.

See *Graham v. John Deere Co.*, 383 U.S. 1; 86 S. Ct. 684; 15 L. Ed. 2d 545; 148 U.S.P.Q. (BNA) 459 (1966).

The Examiner bears the burden of presenting an un rebutted *prima facie* case of obviousness in order to reject claims under 35 U.S.C. § 103(a). See *In re Deuel*, 51 F.3d 1552, 1557; 34 U.S.P.Q.2d (BNA) 1210 51 F.3d 1552 (Fed. Cir.1995). Failure of the Examiner to do so renders a rejection improper.

The Supreme Court confirmed in the *KSR* opinion that the Examiner or court must articulate a rationale for combining *known elements* from the prior art to formulate an obviousness rejection. The Supreme Court states,

“Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See In re Kahn, 441 F. 3d 977, 988 (CA Fed. 2006)” *KSR* at 127 S.Ct. 1740-1741.

Thus, though the Supreme Court has jettisoned the “teaching, suggestion, motivation” rubric, the Examiner must still identify 1) each recited element is known in the art and 2) a viable reason why a person of ordinary skill would have been led to modify the teachings of a reference to arrive at the Applicant’s claimed invention. See *Ex parte Penhasi*, BPAI Appeal No. 2007-2534 (December 13, 2008). In formulating a reason why to combine known features, the Examiner is forbidden from relying on hindsight:

A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See Graham, 383 U.S. at 36, 86 S. Ct. 684, 15 L. Ed. 2d 545 (warning against a “temptation to read into the prior art the teachings of the invention in issue” and instructing courts to “guard against slipping into use of hindsight” (quoting Monroe Auto Equip. Co. v. Heckethorn Mfg. & Supply Co., 332 F.2d 406, 412 (CA6 1964))). *KRS* at 127 S.Ct. at 1742.

Argument

Claim 1 requires a clamp having a first arm defining a first threaded through bore and a second arm defining a second threaded through bore, with the first threaded through bore and the second threaded through bore being essentially coaxial *and essentially the same inner diameter*. Claim 1 further requires a screw having a head and a shank with the shank having a threaded portion opposite the head and a clearance portion between the threaded portion and the head. The screw is configured *for selective insertion in one of the first and second threaded through bores* so that with a threaded engagement between the threaded portion of the shank and one of the first threaded through bore of the first arm or the second threaded through bore of the second arm and the head abutting the other of the first and second arms opposite the threaded engagement, the clearance portion resides within the other of the first and second threaded through bores.

Rejections of Claims 1-4, 6-8, 10 and 14-16 Under 35 U.S.C. § 103(a) obvious over by
Nielsen, U.S. Patent No. 6,186,027 in view of Hand, U.S. Patent No. 1,870,112

The Examiner has failed to make a *prima facie* showing of obviousness of independent claims 1, 6 and 10 over Nielsen in view of Hand. Simply stated, Nielsen does *not* teach through bores of “essentially the same inner diameter”, and in fact teaches away from through bores of essentially the same inner diameter. Hand does not cure this deficiency.

Fig. 3 of Nielsen clearly shows first and second arms 42A, 42B with axially aligned through bores, but only the through bore in the second arm 42B is shown as threaded. The Examiner relies on language at column 3, lines 25-28 to support the first through bore in the first arm 42A as being threaded. Nielsen reads at column 3, lines 25-28 as follows:

“As shown in FIG. 3, the hole in lug 42B is threaded to mate with the threaded shank of screw 40. The hole in lug 42A may but need not be threaded, *but is sized so that screw 40 can be rotated therein.*” (Emphasis added.)

The bolt 40 illustrated in Fig. 3 is a conventional bolt where threads are formed in a threaded portion having an outer diameter equal to an outer diameter of a non-threaded portion of the shaft. This non-threaded portion of the shaft is adjacent the head of the bolt 40 depicted in Fig. 3. In order for the bolt 40 to be fully received in the axially aligned hole in the first arm 42A, this hole must have an inner diameter greater than the outer diameter of the threaded portion and the non-threaded portion of the bolt 40. Accordingly, if, as suggested in the specification, the hole 42A is threaded, the inner diameter of the threads would have to clear the non-threaded portion of the bolt if the structure is to function as a clamp configuration indicated in Fig. 3 (i.e., it must be “sized so that the screw 40 can be rotated therein.”). However, in such a configuration the threaded portion of the bolt would necessarily have to clear the threads in 42A without threaded engagement. (This is because as discussed above, the non-threaded portion and the threaded portion of bolt 40 have the same outer diameter.) Thus, the structure taught in Nielsen would not function as a clamp if the bolt 40 were inserted through the second threaded through bore 42B for at least two reasons. First, the threads of the bolt have an outer diameter less than the inner diameter of the threads in the hole 42A and there would thus not be threaded engagement between the threaded portion of the bolt 40 and the threads of 42A. Second, the non-threaded portion of the bolt 40 would interfere with the threads of the second threaded through bore in 42B such that the bolt could only be screwed into threaded through bore 42B up

to the point of the non-threaded portion. Accordingly, modification of Fig. 3 as suggested by the Examiner in light of the specification would not meet the limitation of claim 1. Specifically, Nielsen fails to teach first and second threaded through bores of essentially the same inner diameter. In addition, Nielsen fails to teach a screw configured for selective insertion in one of the first and second threaded through bores so that with a threaded engagement between the threaded portion of the shank and one of the first threaded through bore of the first arm or the second threaded through bore of the second arm and the head abutting the other of the first and second arms opposite the threaded engagement, the threaded portion resides within the other of the first and second threaded through bores. In other words, while the limitations can be met in part by insertion of the bolt 40 into a threaded hole in 42A as depicted in Fig. 3, it would not be insertable in the second threaded through bore of the second arm 42B in a manner meeting the limitations of claim 1.

Hand does not overcome this failure to show threaded through bores of essentially the same inner diameter. Indeed, Hand teaches away from such a structure. Fig. 2 shows the clamp structure of Hand in cross-section. This structure includes a hole 5 which receives a reduced diameter portion of the bolt, and an axially aligned hole 4, which mates with the threaded portion of the screw 9. The hole 5 has a significant smaller inner diameter than the hole 4. The different hole size is necessary for the proper operation of the Hand clamp. As is clear from the specification, the Hand structure is intended to function such that with the bolt fully screwed into the hole 4 in a clockwise direction it clamps the body 1. However, with the bolt unscrewed in a counter-clockwise direction, the shoulder 10 contacts the periphery of the smaller bore 5, forcing the clamp apart. See page 1, lines 60-69.

It should further be noted that simply substituting the bolt of Hand for the screw of Nielsen does not render claim 1 obvious because, as explained above, Nielsen requires threaded through bores of different inner diameters. Thus, the bolt of Hand might be able to perform a clamping function when inserted into one of the through bores, but it could not perform that clamping function when inserted in the other of the through bores because the inner diameter of the other through bore would be larger than the inner diameter of the first through bore.

Anticipating that the Examiner may be tempted to argue Nielsen could be modified such that the bolts 42A and 42B have essentially the same inner diameter, Applicant reminds the Examiner that he must provide a reason *why* a person of skill in the art would be lead to modify

Nielsen in this way. There is no suggestion in Nielsen or any of the references applied by the Examiner that it is desirable to have a bolt be insertable in either of the first and second threaded through bores to perform a clamping function as recited in claim 1. Indeed, to have the clamping function, not only must the threaded bores have essentially the same inner diameter, the clamp requires the use of a screw as recited in claim 1:

configured for selective insertion in one of a first and second threaded through bores so that with a threaded engagement between the threaded portion of the shank and one of the first threaded through bore of the first arm and the second threaded through bore of the second arm and the head abutting the other of the first and second arms opposite the threaded engagement, a clearance portion resides within the other of the first and second threaded through bores.

As expressly recited in claim 2, this configuration can be accomplished by providing a clearance portion that has an outer diameter sized to clear the first and second through bores and a length at least equal to the axial length of each threaded bore. This requires making a special screw with an outer diameter of the clearance portion less than the other diameter of the threaded portion. Obviously, a person of skill in the art would not provide such a screw without a clear impetus to do so because using such a screw requires special machining increasing the difficulty and cost in making such screws. No compelling reason for making such a substitution can be shown by the Examiner absent a forbidden hindsight analysis beginning with Applicant's invention as described in the specification and recited in the claims.

Accordingly, reconsideration and withdrawal of this grounds of rejection are respectfully requested.

Claim 6 recites first and second threaded through bores having essentially the same size and pitch threading. Claim 6 is not obvious over the combination of Nielsen and Hand because, as set forth above, Nielsen and Hand cannot be combined to teach the element of first and second threaded through bores having the same size and pitch threading.

Accordingly, reconsideration and withdrawal of this rejection of claim 6 are respectfully requested.

Claim 10 recites forming "identical co-axial cylindrical threaded through bores through the distal ends of first and second arms." As discussed above with respect to claim 1, none of the applied references alone or in combination teach identical coaxial threaded through bores. Thus, reconsideration and withdrawal of the rejection of claim 10 are respectfully requested.

For at least the reasons set forth above with respect to independent claims 1, 6 and 10, the claims dependent therefrom are believed to be non-obvious over Nielsen in view of Hand.

Rejection of claim 9 Under 35 U.S.C. § 103(a) as being unpatentable over Nielsen in view of Hand and further Duda, U.S. Patent No. 2,287,343

Duda fails to overcome the deficiencies of Nielsen in view of Hand. Namely, Nielsen does not teach opposing threaded through bores of essentially the same size. Instead, Duda teaches a threaded opening 8 and opening 10 which is unthreaded. Only in one orientation, namely when the threaded bolt 9 is inserted first in the unthreaded hole 10 can the device function as a clamp. See column 2, lines 39-44. Of course, one skilled in the art would understand that the hole 10 must have a larger inner diameter than the hole 8 or the shaft of the bolt 9 cannot be slidably received in the unthreaded opening 10. Thus, reconsideration and withdrawal of rejection of claim 9 are respectfully requested.

Rejection of Claims 1, 4, 5, 11-13 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Gelbein, U.S. Patent No. 5,584,210 in view of Nielsen and further in view of Hand

Gelbein does not overcome the deficiencies of the teachings of Nielsen and Hand. Specifically, Gelbein does not teach opposing threaded through bores having essentially the same inner diameter. Thus, claim 1 and its dependent claims cannot be rendered obvious by this combination of references.

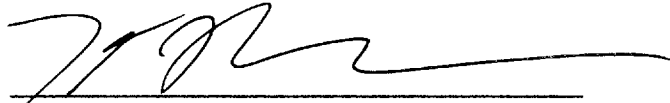
Claim 11 also includes the limitation “first and second threaded through bores being essentially coaxial and of essentially the same inner diameter.” Thus, claim 11 cannot be rendered obvious by a combination of Gelbein, Nielsen and Hand. Likewise, claims 12, 13 and 17, which are dependent from claim 11, cannot be rendered obvious by this combination of references. Thus, reconsideration of and withdrawal of this grounds of rejection are respectfully requested.

In summary, Applicant respectfully submits that claims 1-17 are patentable over the applied art and prompt issuance of a Notice of Allowance is respectfully requested. If it would be helpful to obtain favorable consideration of this case, the Examiner is encouraged to call and discuss this case with the undersigned.

This constitutes a request for any needed extension of time and an authorization to charge all fees therefor to deposit account No. 19-5117, if not otherwise specifically requested. The undersigned hereby authorizes the charge of any fees created by the filing of this document or any deficiency of fees submitted herewith to deposit account No. 19-5117.

Respectfully submitted,

Date: June 4, 2009



Thomas D. Bratschun, #32,966
Swanson & Bratschun, L.L.C.
8210 SouthPark Terrace
Littleton, Colorado 80120
Telephone: (303) 268-0066
Facsimile: (303) 268-0065